

# **Guidelines for TIES Design Notebooks**

A design notebook is used to record information acquired and ideas developed during the design process.

## **Design notebook contents: What goes in the design notebook?**

- ⇔ Record your work on the project, including brainstorming, sketches, calculations, designs, and action items.
- ⇔ Record project meetings, including team sessions and working group (subgroup) sessions. Include agendas, major discussion items, and action items that result from the meeting.
- ⇔ Record relevant information and discussions from TIES lectures.
- ⇔ Record contact information (name, phone number, email, address -- whatever is relevant) for people with whom you consult about the project. Record information about conversations with the project partner. Record outcomes from all relevant conversations, including phone and email conversations.
- ⇔ Use the design notebook to keep detailed records of library and patent searches and to record relevant URLs resulting from WWW searches.
- ⇔ For software, describe the work done and give the location where the software can be found.
- ⇔ If documents are too big to insert, note what they contain and where they can be found.
- ⇔ Include important information that your team has compiled that pertains to the project.
- ⇔ Include conclusions and recommendations.
- ⇔ Include enough narrative to explain what is being done; make entries readable by other engineers.
- ⇔ Factoid: Thomas Edison completed over 2500 design notebooks in his lifetime.

## **Why keep a design notebook?**

- ⇔ The design notebook documents your effort on a project. For TIES projects, it is the principal evidence of your individual effort and is therefore an important factor in your course grade.
- ⇔ Design notebooks may be used in patent and legal evaluations. Factoid: In the U.S., patents are awarded based on evidence of "first to discover"; in most other countries, patents go to the "first to file".
- ⇔ The design notebook is a useful resource for preparing reports.
- ⇔ Since TIES projects span several quarters/years, the design notebook helps you recall things from one quarter to the next.
- ⇔ Since TIES teams evolve from one quarter to the next, the design notebooks can help new team members pick up where previous team members left off. When you leave the TIES program, you will leave your notebook with your team as a reference for later team members.

### **Written Design notebook format**

- ⇔ Put your name, phone number, and email address on the front cover.
- ⇔ Recommended: Pre-number the pages in the notebook.
- ⇔ Use ink.
- ⇔ Date all entries.
- ⇔ Recommended: Sign each page. This is relevant for patents.
- ⇔ Tape or staple documents (e.g., handouts, meeting agendas) into the notebook.
- ⇔ Record directly into the notebook; do not make notes on other pieces of paper and transcribe them into the notebook later. (Exception: computer printouts)
- ⇔ Write legibly.
- ⇔ Include narrative to describe sketches, diagrams, plots, and equations.

### **TIES design notebook evaluation form**

The design notebooks will be evaluated in lab in weeks 5 and 10 of each quarter. Evaluation criteria are summarized on the Design Notebook Evaluation Form ([URL here](#)).