

ECE 4810 APPLICATION FOR PROJECT TOPIC APPROVAL (V11)

TEAM MEMBERS: _____

PROJECT TOPIC: _____ Submission Date: _____

A. As a group, on attached sheets **with all text typed and double spaced**:

- 1) Give a several page **INTRODUCTION** to your project. Include in this introduction the project **BACKGROUND** and the **NEED** that this project is to satisfy. Indicate whether this project will be sponsored and if so, by whom and at what level: e.g. advice from company engineers, money for parts, etc. Obtain help in preparing the final draft of this section from the Writing Center. **BE SURE** to have the Writing Center tutor send her/his report of your help session to the course instructor.
- 2) Enumerate the project **SPECIFICATIONS** (quantitatively where possible). *Used numbered headings to organize your specifications.* Explain and discuss each.
- 3) Research your project and potential design concept(s) via a **LITERATURE SEARCH**. Briefly describe your search and its results. Be specific. List each significant information item found, summarize your findings for that item, and give the **complete reference** for the source of the information **in the references section**. Only use a citation such as '[1]' to refer to the reference in the text. Note that at least 10 items are expected.
- 4) Describe your current **DESIGN CONCEPT** for the project and include an explanation of how it satisfies each of the specifications. Draw sketches illustrating your current vision of the project hardware. Use block diagrams and/or flow charts to illustrate its functionality and/or information flow. Additional references to information sources such as application notes, datasheets, etc. will likely appear here. Be sure each source is cited as in the literature search.
- 5) Based on your current Design Concept, give an enumerated list of those *items that YOUR team plans to design*.
- 6) Make a table that lists the categories of technologies that will be required by the project and of the ECE courses that provide preparation in these technologies, e.g. ECE 4200 Power Electronics might be listed for a project requiring 'power electronics technology'. Then **show** (in the same or a different table) that the team collectively has the experience (course work or other) necessary to master the project technologies. For example, if the project might require microcontroller technology, at least one team member must have successfully completed ECE 4510. **Include copies of resumes of all team members in an appendix. Do not include confidential information (e.g. grades) in the PTA.** The resumes should demonstrate that the team members have the necessary credentials to successfully complete the project. Each team member must **INDIVIDUALLY** submit an unofficial transcript in a sealed envelope with the PTA (one sealed envelope per student).

B. **COMPLETE PAGE 2** of this application and sign as appropriate.

C. **BIND** or **STAPLE** one copy of this form to the **FRONT** of your application.

D. **Optional:** Faculty Advisor preference: _____ Did you discuss this with the Faculty Member? Yes No

E. Check your application using the *Project Topic Application Grading Form* and the *Partial Checklist for Homework* in the ECE 4810 syllabus and make any necessary changes before submitting.

Approved Rejected

Needs modifications

Course Coordinator Date

Department Chairperson Date

Assigned Advisor _____

ECE 4810 Project Topic Application Sponsor Notification Form

- A.** The undersigned agree and have notified the sponsor of this potential senior design project that
1. the final written project report, that ideally documents all project-related work, will be available as a public document;
 2. this project will be described in detail at a public senior design conference; and
 3. that senior design projects may only utilize information widely available to the engineering and scientific communities (see the course syllabus for details and a reference).

team member (print)

team member (sign)

date
