**FACULTY OF ENGINEERING**

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**EE 401 – Senior Project I**

**<Year and FALL or SPRING>**

**FINAL REPORT**

**<Project Name>**

**<Student Name>**

**Jury Members:**

**Supervisor : <\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_> \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Jury member 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Jury member 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# Project description and goals

- Describe the final objective of your project using the following format:

 - Project objective <example: The objective of this project is to design a wireless thermometer system that can monitor 5 wireless thermometers and save the results in a computer harddisk>

 - Specifications of the system <example: Bluetooth 3.0 communication between the main processing unit and sensor nodes. Temperature measurement accuracy: +-1 degree Celsius. Power consumption for each sensor node: less than 1 mA.>

 - Constraints <example: each sensor node should cost less than 2$ in mass production, should not contain any hazardous material> <Discuss here also if there are any physical, technical, social, environmental and economic constraints>

- Briefly describe your design.

- Prepare a table of the final deliverables of the project and goals for this semester. The list of deliverables should reflect the supervisor’s feedback on your progress reports.

- In the table, indicate how much you managed to achieve these goals. Add comments for the goals that you could not achieve (Bad planning? Very difficult to achieve? Could not allocate time as much as needed? …..)

# Work done

- Describe all the work you had done during the semester. Include a block diagram of your design. Give details about your design. Describe the tests and optimization you did and how you changed the design to deliver the final goals.

- Explain the tools you used.

- Present your results. Your results should be in line with the table you prepared in the previous section. If you achieved a goal 100% then you should be able to present a result corresponding to this goal and you should be able to persuade the jury members that you actually delivered the required results.

- Compare actual time spent on each project tasks and your initial planning.

- Comment on the constraints and describe if your design satisfies all the project specs within the project constraints.

# References

- List relevant references such as journal papers, product manuals, data sheets etc.

# Project Enquiry Form: Standards and Constraints

**Q1.** What is the **project scope**?

*Is it a new project or a part of another project? If it is a part of another project, what is the proportion (%) of your contribution?*

**Q2.** Did you formalize an **engineering problem** yourself and solve it?

*Did you come up with an engineering problem? Did you picked a project topic suggested by a faculty member and then refined/detailed the problem? Did you propose a design, solution, approach, method for this problem?*

**Q3.** Among the **knowledge and skill set** that you have acquired in your previous **courses**, which of them were utilized for this project?

*Which courses and knowledge you acquired in these courses were helpful for coming up with a design for this project?*

**Q4.** What are the **engineering standards** that you either used or took into consideration?

*Provide the codes and names of standards that you used for your project.*

**Q5.** Discuss the possible **effects of your project** under the following titles, and explain how these were used as **constraints** guiding your project.

1. **Economics**:
2. **Impact on Environment**:
3. **Sustainability**:
4. **Manufacturability**:
5. **Ethics**:
6. **Health**:
7. **Security**:
8. **Social and political issues**: