A project proposal is required for project courses. The project proposal will be submitted to the course instructor for approval. The student will complete this project proposal form and attach the project proposal. Each of the following must be included in the proposal:

1. Problem definition
2. Concept Generation/Requirements Specification
3. Design
4. Prototype
5. Testing
6. System Integration
7. Project schedule
8. Deliverables

Design

1. Problem definition
   a. Problem Identification – idea, request, market needs.
      What are you trying to do? How is it being done today?
      What is new in your approach? What will be improved if it is successful.
   b. Research
      What are the basic knowledge/concepts/procedures/rules needed to design and construct the circuit? What are the basic performance criteria? Constraints? Standards?

2. Concept Generation/Requirement Specification
   What is the concept? What are the parts and components that will be used to design and construct the circuit? Do you have a preliminary design?

3. Design
   What design considerations influence the design? What design alternatives have you considered? List implementation considerations.
4. **Prototype**
   a. Construct a prototype. Test the circuit to determine preliminary analysis, make changes and revise the design if needed.

   b. Provide a final list of materials/components, and circuit diagram.

5. **System Integration**
   Explain/show how the circuit solves a problem when integrated into a system. What type of quality control and testing will be required? Maintenance required? Possible upgrades? Recycling/Rebuilding? What is the cost?

6. **Timeline**
   Provide a list of activities to be completed and a schedule. Use a GANTT chart or similar tool.

7. **Deliverables**
   Provide a list of all the deliverables for the project that includes, but not limited to, Final report, Power point presentation, Poster presentation, and the circuit.

Signature of Student ____________________________ Date ___________________

Print Name of Instructor _____________________ Phone NO. __________________

Signature of Instructor* ___________________________ Date ___________________

Signature 0f Advisor ____________________________ Date ___________________

Department Chairman ___________________________ Date ___________________

Note to faculty: Please sign only after checking that Engineering Standards and realistic constraints are included in the proposal.